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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,873

09/17/2003

Hisashi Tsukamoto

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MARY ELIZABETH BUSH
QUALLION LLC
P.O. BOX 923127
SYLMAR, CA 91392-3127

EXAMINER

LEE, CYNTHIA K

ART UNIT

PAPER NUMBER

1795

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/666,873	Applicant(s) TSUKAMOTO ET AL.	
	Examiner CYNTHIA LEE	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-41, 71-78 and 80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-41, 71-78 and 80 is/are rejected.
- 7) ☒ Claim(s) 41, 72 and 80 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/26/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is responsive to the amendment filed on 3/26/2008. Claims 39-41, 71-78, and 80 are pending. The instant claims are rejected under new grounds of rejections in light of the new prior art cited on the IDS submitted on 3/26/2008. Thus, claims 39-41, 71-78, and 80 are finally rejected as necessitated by the IDS submitted.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 79 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 20 of copending Application No. 10/666860. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29

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USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 39-41, 71-78, and 80 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-28, 67, 78, 79, 80-83 of copending Application No. 10/666860. Claims 39-41, 71-78, and 80 of the instant application is anticipated by copending application claims 20-28, 67, 78, 79, 80-83 in that claims of the copending application contains all the limitations of claim of the instant application. Claims 39-41, 71-78, and 80 of the instant application therefore is not patently distinct from the copending claim and as such is unpatentable for obvious-type double patenting.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the conflicting claims in the examined application claims fall entirely within the scope of the claims of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39, 40, 71, 74-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gartstein (US 2002/0001745) in view of Klein (US 4476624).

Refer to Fig. 3. Gartstein discloses a method of constructing an electric storage battery comprising connecting a first end of a first electrode strip (32) to a pin (26); winding the first electrode strip together with a second electrode strip so as to form a spiral roll having at least a portion of the pin within the spiral roll [0055]. The electrodes are rolled around the pin (Applicant's claims 39 and 71). Gartstein does not disclose positioning a mandrel on a pin such that a portion of a first electrode strip is positioned between the mandrel and the pin (Applicant's claim 39). Klein teaches a novel mandrel comprised of an elongated longitudinally deformed metal strip and a compression element adapted to fit within the deformity of the metal strip. Preferably the metal strip is of a uniform enclosing configuration such as of a "U" or "C" shaped cross section and the compression element is preferably a solid plastic rod (applicant's claim 77). During the construction of the cell an electrode such as lithium with separator elements on both sides thereof is placed within the deformity with the compression element compressing and fixedly positioning the electrode into the deformity of the mandrel. The

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compression element is then locked into position such as by crimping the mandrel therearound to positively hold the electrode in place during subsequent winding (applicant's claim 40). With an anode metal electrode such as of lithium, a percut opening in the separator element adjacent the mandrel permits contact and cold welding between the anode metal and the mandrel during the compression step. Refer to 1:65-2:5). Klein teaches that an inserting element 20 (or pin) is lowered (or inserted) into the mandrel 10 (2:55-57) (Applicant's claim 78). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the mandrel and the pin of Klein for Gartstein's pin for the benefit of tightly gripping the electrode during the winding of the battery.

Regarding claim 74, Gartstein discloses that the end cap includes a conductive member (16) surrounding the insulator (24).

Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gartstein (US 2002/0001745) in view of Klein (US 4476624) as applied to claim 39, in view of Chang (US 4863815).

Gartstein modified by Klein teaches all the elements of claim 39 and are incorporated herein. Gartstein discloses that the end cap is a cap for the battery case. Gartstein modified by Klein teaches that the pin extends through the insulator 24, but does not disclose that the pin extends through the case. Chang teaches an electrically conductive terminal pin extending through battery lid (see 6 in fig. 1). It would have been obvious to one of ordinary skill in the art to extend the terminal pin through the end

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cap of the battery of Gartstein modified by Klein, as taught by Chang, for the benefit of extracting the current of the battery directly from the current collector instead of through the positive terminal.

Allowable Subject Matter

Claims 41, 72, and 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Closest prior arts are McHenry and Klein. Neither prior arts disclose “welding mandrel to the pin” of claim 41. Neither prior arts disclose “wherein the mandrel is positioned on the pin such that the mandrel is in electrical communication with the pin” of claim 72. The mandrel and pin of McHenry are not welded because the pin is made of metal and the mandrel 13 is a plastic sleeve. The mandrel and pin of McHenry are not welded because the mandrel is the anode terminal and the pin is formed of plastic.

Neither prior arts disclose “wherein the first end of the first electrode strip is connected to the pin such that the pin is in electrical communication with the first electrode strip” of claim 80. The pin of Klein is formed of plastic.

Response to Arguments

Applicant's arguments filed 3/26/2008 have been fully considered but they are not persuasive.

Prior art rejections have been applied in view of the newly cited prior art in the IDS submitted on 3/26/2008. Accordingly, the Double Patenting Rejection is maintained.

Conclusion

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 3/26/2008 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ckl

Cynthia Lee

Patent Examiner

/PATRICK RYAN/

Supervisory Patent Examiner, Art Unit 1795

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